

Amendments to the Specification

Amend paragraph [0012] as follows.

[0012] Such implementation has several disadvantages. Characteristics such as large FSR and low loss are important for a micro-ring resonator, regardless the specific function it fulfills. However, achieving these characteristics simultaneously is difficult since the demands on the resonator shape conflict ~~contradict~~. To achieve large FSR resonator, the best design would be a circular ring with high refractive index contrast to achieve tight mode profiles. However, these characteristics would result in high losses which stem from three different mechanisms: